

coordinated management of component **2302** to send one truck to zip code **ZC1** rather than two partially loaded trucks. Such coordinated management of component **2302** can be provided by a herein-described warehouse and supply-chain coordinator, such as warehouse and supply-chain coordinator **100**. The warehouse and supply-chain coordinator can recognize two partial truck loads going to the same destination or nearby region, such as an area covered by one zip code, determine a facility that has most, if not all, of the goods to be carried in the two partial truck loads, and send one truck from that facility with the goods to the destination or nearby region to deliver the goods of the two partial truck loads. Consolidation of truck loads can be performed based on other and/or additional reasons than geography, such as a type of goods/vehicle to be used (e.g., refrigerated goods, gas/liquid goods, use of a refrigerated truck, tanker truck, air freight, or sea vessel), a priority of the goods/shipment may continue to have partial loads for high-priority shipments and/or high-value goods).

FIG. **24** is a block diagram of supply chain **2400**, in accordance with an example embodiment. Supply chain **2400** shows effects of further consolidation to supply chain **2300**. Component **2302** of supply chain **2300** has been consolidated to become component **2402** of supply chain **2400**. Component **2402** has one fewer facility and two more paths, with one facility—facility **2226**—being directly connected to all of the other seven facilities **2212**, **2220**, **2222**, **2238**, **2250**, **2254**, **2260** of component **2402**, while no facility of component **2302** was directly connected to all other facilities of that component. With fewer facilities and more paths than in component **2302**, fewer facilities have to be maintained and fewer intermediate facilities are likely to be used in component **2402**, and thus making component **2402** more time-efficient and cost-effective than component **2302**.

Also, component **2404** has been consolidated to use only three facilities—facilities **2230**, **2232**, and **2410**—which are all directly interconnected. In comparison, component **2304** of supply chain **2300** used five facilities, only one of which was fully connected. With fewer facilities and more paths than in component **2304**, fewer facilities have to be maintained and fewer intermediate facilities are likely to be used in component **2404**, and thus making component **2404** more time-efficient and cost-effective than component **2304**.

In some examples, component **2402**, component **2404**, and/or supply chain **2400** is configured, such as by the herein-described warehouse and supply-chain coordinator, to provide on-demand logistics and/or supply chain services; i.e., provide logistics as a service in a similar fashion to cloud computing devices provide various computing services on demand. That is, the warehouse and supply-chain coordinator enables reception of an order from a customer for warehousing, transportation, goods manufacture, supply provisioning, and/or other various logistics/supply-chain related services, and component **2402**, component **2404**, and/or supply chain **2400** provides those services to the customer without the customer having to manage details of where goods are stored, transportation of goods through the supply chain, obtaining goods from suppliers and manufacturers, and supervision of warehouses.

## CONCLUSION

The present disclosure is not to be limited in terms of the particular embodiments described in this application, which are intended as illustrations of various aspects. Many modifications and variations can be made without departing from

its spirit and scope, as will be apparent to those skilled in the art. Functionally equivalent methods and apparatuses within the scope of the disclosure, in addition to those enumerated herein, will be apparent to those skilled in the art from the foregoing descriptions. Such modifications and variations are intended to fall within the scope of the appended claims.

The above detailed description describes various features and functions of the disclosed systems, devices, and methods with reference to the accompanying figures. In the figures, similar symbols typically identify similar components, unless context dictates otherwise. The illustrative embodiments described in the detailed description, figures, and claims are not meant to be limiting. Other embodiments can be utilized, and other changes can be made, without departing from the spirit or scope of the subject matter presented herein. It will be readily understood that the aspects of the present disclosure, as generally described herein, and illustrated in the figures, can be arranged, substituted, combined, separated, and designed in a wide variety of different configurations, all of which are explicitly contemplated herein.

With respect to any or all of the ladder diagrams, scenarios, and flow charts in the figures and as discussed herein, each block and/or communication may represent a processing of information and/or a transmission of information in accordance with example embodiments. Alternative embodiments are included within the scope of these example embodiments. In these alternative embodiments, for example, functions described as blocks, transmissions, communications, requests, responses, and/or messages may be executed out of order from that shown or discussed, including substantially concurrent or in reverse order, depending on the functionality involved. Further, more or fewer blocks and/or functions may be used with any of the ladder diagrams, scenarios, and flow charts discussed herein, and these ladder diagrams, scenarios, and flow charts may be combined with one another, in part or in whole.

A block that represents a processing of information may correspond to circuitry that can be configured to perform the specific logical functions of a herein-described method or technique. Alternatively or additionally, a block that represents a processing of information may correspond to a module, a segment, or a portion of program code (including related data). The program code may include one or more instructions executable by a processor for implementing specific logical functions or actions in the method or technique. The program code and/or related data may be stored on any type of computer readable medium such as a storage device including a disk or hard drive or other storage medium.

The computer readable medium may also include non-transitory computer readable media such as non-transitory computer-readable media that stores data for short periods of time like register memory, processor cache, and random access memory (RAM). The computer readable media may also include non-transitory computer readable media that stores program code and/or data for longer periods of time, such as secondary or persistent long term storage, like read only memory (ROM), optical or magnetic disks, compact-disc read only memory (CD-ROM), for example. The computer readable media may also be any other volatile or non-volatile storage systems. A computer readable medium may be considered a computer readable storage medium, for example, or a tangible storage device.

Moreover, a block that represents one or more information transmissions may correspond to information transmissions between software and/or hardware modules in the